

**§ 195.304**

- (3) The volume indicator is—
- (i) High risk if the line is at least 18 inches in nominal diameter;
  - (ii) Medium risk if the line is at least 10 inches, but less than 18 inches, in nominal diameter; or
  - (iii) Low risk if the line is not high or medium risk.

(4) The probability of failure indicator is—

- (i) High risk if the segment has experienced more than three failures in the last 10 years due to time-dependent defects (e.g., corrosion, gouges, or problems developed during manufacture, construction or operation, etc.); or
- (ii) Low risk if the segment has experienced three failures or less in the last 10 years due to time-dependent defects.

(c) The program under paragraph (a) of this section shall provide for pressure testing for a segment constructed of electric resistance-welded (ERW) pipe and lapwelded pipe manufactured prior to 1970 susceptible to longitudinal seam failures as determined through paragraph (d) of this section. The timing of such pressure test may be determined based on risk classifications discussed under paragraph (b) of this section. For other segments, the program may provide for use of a magnetic flux leakage or ultrasonic internal inspection survey as an alternative to pressure testing and, in the case of such segments in Risk Classification A, may provide for no additional measures under this subpart.

(d) All pre-1970 ERW pipe and lapwelded pipe is deemed susceptible to longitudinal seam failures unless an engineering analysis shows otherwise. In conducting an engineering analysis an operator must consider the seam-related leak history of the pipe and pipe manufacturing information as available, which may include the pipe steel's mechanical properties, including fracture toughness; the manufacturing process and controls related to seam properties, including whether the ERW process was high-frequency or low-frequency, whether the weld seam was heat treated, whether the seam was inspected, the test pressure and duration during mill hydrotest; the quality control of the steel-making process; and other factors pertinent to seam properties and quality.

**49 CFR Ch. I (10–1–13 Edition)**

(e) Pressure testing done under this section must be conducted in accordance with this subpart. Except for segments in Risk Classification B which are not constructed with pre-1970 ERW pipe, water must be the test medium.

(f) An operator electing to follow a program under paragraph (a) must develop plans that include the method of testing and a schedule for the testing by December 7, 1998. The compliance deadlines for completion of testing are as shown in the table below:

**§ 195.303—TEST DEADLINES**

Pipeline Segment	Risk classification	Test deadline
Pre-1970 Pipe susceptible to longitudinal seam failures [defined in § 195.303(c) & (d)].	C or B .....	12/7/2000
	A .....	12/7/2002
All Other Pipeline Segments.	C .....	12/7/2002
	B .....	12/7//2004
	A .....	Additional testing not required

(g) An operator must review the risk classifications for those pipeline segments which have not yet been tested under paragraph (a) of this section or otherwise inspected under paragraph (c) of this section at intervals not to exceed 15 months. If the risk classification of an untested or uninspected segment changes, an operator must take appropriate action within two years, or establish the maximum operating pressure under § 195.406(a)(5).

(h) An operator must maintain records establishing compliance with this section, including records verifying the risk classifications, the plans and schedule for testing, the conduct of the testing, and the review of the risk classifications.

(i) An operator may discontinue a program under this section only after written notification to the Administrator and approval, if needed, of a schedule for pressure testing.

[Amdt. 195–65, 63 FR 59480, Nov. 4, 1998]

**§ 195.304 Test pressure.**

The test pressure for each pressure test conducted under this subpart must be maintained throughout the part of the system being tested for at least 4 continuous hours at a pressure equal to 125 percent, or more, of the maximum

operating pressure and, in the case of a pipeline that is not visually inspected for leakage during the test, for at least an additional 4 continuous hours at a pressure equal to 110 percent, or more, of the maximum operating pressure.

[Amdt. 195-51, 59 FR 29384, June 7, 1994. Redesignated by Amdt. 195-65, 63 FR 59480, Nov. 4, 1998]

#### § 195.305 Testing of components.

(a) Each pressure test under §195.302 must test all pipe and attached fittings, including components, unless otherwise permitted by paragraph (b) of this section.

(b) A component, other than pipe, that is the only item being replaced or added to the pipeline system need not be hydrostatically tested under paragraph (a) of this section if the manufacturer certifies that either—

(1) The component was hydrostatically tested at the factory; or

(2) The component was manufactured under a quality control system that ensures each component is at least equal in strength to a prototype that was hydrostatically tested at the factory.

[Amdt. 195-22, 46 FR 38360, July 27, 1981, as amended by Amdt. 195-51, 59 FR 29385, June 7, 1994; Amdt. 195-52, 59 FR 33397, June 28, 1994. Redesignated by Amdt. 195-65, 63 FR 59480, Nov. 4, 1998]

#### § 195.306 Test medium.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, water must be used as the test medium.

(b) Except for offshore pipelines, liquid petroleum that does not vaporize rapidly may be used as the test medium if—

(1) The entire pipeline section under test is outside of cities and other populated areas;

(2) Each building within 300 feet (91 meters) of the test section is unoccupied while the test pressure is equal to or greater than a pressure which produces a hoop stress of 50 percent of specified minimum yield strength;

(3) The test section is kept under surveillance by regular patrols during the test; and

(4) Continuous communication is maintained along entire test section.

(c) Carbon dioxide pipelines may use inert gas or carbon dioxide as the test medium if—

(1) The entire pipeline section under test is outside of cities and other populated areas;

(2) Each building within 300 feet (91 meters) of the test section is unoccupied while the test pressure is equal to or greater than a pressure that produces a hoop stress of 50 percent of specified minimum yield strength;

(3) The maximum hoop stress during the test does not exceed 80 percent of specified minimum yield strength;

(4) Continuous communication is maintained along entire test section; and

(5) The pipe involved is new pipe having a longitudinal joint factor of 1.00.

(d) Air or inert gas may be used as the test medium in low-stress pipelines.

[Amdt. 195-22, 46 FR 38360, July 27, 1991, as amended by Amdt. 195-45, 56 FR 26926, June 12, 1991; Amdt. 195-51, 59 FR 29385, June 7, 1994; Amdt. 195-53, 59 FR 35471, July 12, 1994; Amdt. 195-51A, 59 FR 41260, Aug. 11, 1994; Amdt. 195-63, 63 FR 37506, July 13, 1998]

#### § 195.307 Pressure testing above-ground breakout tanks.

(a) For aboveground breakout tanks built into API Specification 12F and first placed in service after October 2, 2000, pneumatic testing must be in accordance with section 5.3 of API Specification 12 F (incorporated by reference, *see* §195.3).

(b) For aboveground breakout tanks built to API Standard 620 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 7.18 of API Standard 620 (incorporated by reference, *see* §195.3).

(c) For aboveground breakout tanks built to API Standard 650 (incorporated by reference, *see* §195.3) and first placed in service after October 2, 2000, testing must be in accordance with Section 5.2 of API Standard 650 (incorporated by reference, *see* §195.3).

(d) For aboveground atmospheric pressure breakout tanks constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C that are returned